The opinion in support of the decision being entered today was <u>not</u> written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte CHRISTIAAN BEINDORFF, FREDERICK WILLIAM CAIN, JOHN HUGH PIERCE, ERIK SCHWEITZER and JEROEN NICOLAAS M. VAN STRAALEN

> Appeal No. 2005-0808 Application No. 09/863,439

> > **ON BRIEF**

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U.S. PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Before WILLIAM F. SMITH, ELLIS and SCHEINER, Administrative Patent Judges.

SCHEINER, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1, 2, 5-14 and 17-23, all of the claims remaining.

Claim 1 is representative of the subject matter on appeal:

1. A blend of a health component and a glyceride, wherein the health component is a mixture comprising ursolic acid and oleanolic acid in a weight ratio of 1:99 to 99:1, wherein the mixture is isolated from fruit skins and contains less than 20 wt % of the natural apolar and/or low molecular weight components present in natural extracts for ursolic acid and oleanolic acid which provide an off taste to said natural extract, and wherein the blend contains 5-80 wt % of one or more components selected from mono-, di- and triglycerides as the glyceride and the glyceride part of the blend displays a solid fat content measured by NMR-pulse on a non-stabilised [sic] fat at the temperature indicated of:

5 to 90 at 5°C 2 to 80 at 20°C and less than 15 at 35°C. Appeal No. 2005-0808 Application No. 09/863,439

The references relied on by the examiner are:

Snyckers et al. (Snyckers)	4,752,606	Jun. 21, 1988
Kang et al. (Kang)	5,948,460	Sep. 7, 1999

Mishurova et al. (Mishurova) SU 0 827 066 B May 7, 1981 (English language translation from the original Russian language document)

Claims 1, 2, 5-14 and 17-23 stand rejected under 35 U.S.C. § 103 as unpatentable over Kang, Snyckers and Mishurova.

We reverse.

DISCUSSION

According to the specification, ursolic acid and oleanolic acid "are known for their health effects," and "can be obtained by extracting natural sources like fruit skins or herbs . . . in amounts of about 5-50% and in weight ratios [of 1:99 to 99:1]. However, these extracts have . . . a severe negative off flavor" (Specification, page 1). In developing a mixture "containing sufficient amounts of ursolic acid and oleanolic acid to [be] useful for application in foods as [a] health component," appellants found that "the negative off flavor of the ursolic/oleanolic acid mixture is due to the presence of natural apolar and/or low molecular weight components in the natural extracts" (id.). "The apolar and/or low molecular weight components were found to be . . . hydrocarbons, alcohols, fatty acids, triglycerides, ketones and carbohydrates" (id., page 2), which could be removed from the mixture through a series of extractions and crystallizations (id., pages 6-9).

In its broadest aspect, the claimed invention is directed to a composition comprising 5-80 wt % glyceride (with a solid fat content of 5-90 at 5°C, 2-80 at 20°C, and less than 15 at 35°C) blended with a mixture of ursolic acid and oleanolic acid, wherein the mixture of ursolic acid and oleanolic acid is isolated from fruit skins and

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contains "less than 20 wt % of the natural apolar and/or low molecular weight components present in natural extract for ursolic acid and oleanolic acid which provide an off taste to said natural extract" (claim 1).

Kang describes an additive "which improves the [metallic] aftertaste of artificial sweeteners in flavored products such as diet beverages, personal hygiene products (such as toothpaste) and foods" (Kang, column 2, lines 56-59), comprising "an effective amount of at least one . . . of polygodial, oleanolic acid, and ursolic acid" (column 3, lines 23-28). According to Kang, "[t]he amount required to improve the aftertaste . . . depends upon the type and amount of sweetener" and is "[g]enerally . . . between about 0.1 ppm and 1000 ppm with respect to the artificial sweetener" (column 4, lines 20-24). The compound or compounds "may be added [to the artificial sweetener] as a purified product, as a crude extract . . . or as a mixture of the two" (id., lines 12-15). Experiments 1 through 4 demonstrate the results of adding polygodial, oleanolic acid, or ursolic acid to artificially sweetened diet beverages.

Snyckers describes extraction and purification of oleanolic acid from grape husks for use in "the prevention or reduction of stress induced gastro-intestinal ulcerations" (Snyckers, column 3, lines 42-44). Mishurova describes extraction and purification of ursolic acid from Nereta transcaucasica for use in "the pharmaceutical industry" (Mishurova, page 2 of the English language translation).

The examiner concedes that Kang "does not specifically teach adding the oleanolic acid and ursolic acid composition to a food that contains a glyceride[;]" "oleanolic acid and ursolic acid hav[ing] the same characteristics claimed by applicant[;]" or "adding the ingredients in the amounts claimed by applicant" (Answer,

pages 3 and 4). Nevertheless, the examiner argues that the claimed invention "would have been obvious at the time of applicant's invention" because "[Kang] teach[es] that the acids can be added to any product that is artificially flavored including food and beverages[;]" "glycerides . . . are well known food ingredients[;]" and "[a] person of ordinary skill in the art would recognize the benefits of using the high purity extracts taught by [Snyckers and Mishurova]" in "the optimal amount of each ingredient . . . to best achieve the desired results" (id.).

"[T]he examiner bears the initial burden of presenting a <u>prima facie</u> case of obviousness." <u>In re Rijckaert</u>, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). The examiner may establish a case of <u>prima facie</u> obviousness based on a combination of references "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." <u>In re Fritch</u>, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992).

It may well be that one skilled in the art of food production would have found it obvious to purify oleanolic acid and ursolic acid according to the pharmaceutical standards described by Snyckers and Mishurova, even though Kang teaches that crude extracts of the acids are suitable for use as additives to artificially sweetened products. Nevertheless, we see nothing in Kang's generic reference to artificially sweetened foods and beverages which would have led one skilled in the art to mix the acids with a blend containing 5-80 wt % glycerides having the solid fat content specified by the claims.

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"It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992), citing In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). As set forth in In re Kotzab, 217 F.3d 1365, 1369-70, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000):

A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. [] Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher." []

[T]o establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. [citations omitted]

In other words, "there still must be evidence that 'a skilled artisan, . . . with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." <u>Ecolochem Inc. v. Southern</u>

<u>California Edison</u>, 227 F.3d 1361, 1375, 56 USPQ2d 1065, 1075-76 (Fed. Cir. 2000).

The fact that the prior art could have been modified in a manner consistent with appellant's claims would not have made the modification obvious unless the prior art suggested the desirability of the modification. <u>In re Gordon</u>, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). On this record, the only reason or suggestion to combine the references in the manner required by even the broadest claim comes from appellant's specification.

Accordingly, the rejection of claims 1, 2, 5-14 and 17-23 under 35 U.S.C. § 103 is reversed.

REVERSED

William F. Smith
Administrative Patent Judge

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Joan Ellis

Administrative Patent Judge

) BOARD OF PATENT

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) INTERFERENCES

Toni R. Scheiner

Administrative Patent Judge

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